

LISTING OF CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A monolithic optical component comprising:
a light-absorbing layer,
a waveguide coupled evanescently with the said light-absorbing layer, such waveguide having one end coupled with an input face ~~facet~~ of the component to receive an input wave, and the component being characterized in that the input face is convex.
2. (Currently Amended) The optical component according to claim 1, wherein ~~characterized in that~~ the input face has the shape of a cylindrical diopter with generators perpendicular to the plane of the light-absorbing layer.
3. (Currently Amended) The optical component according to claim 2, wherein ~~characterized in that~~ the radius of curvature of the cylindrical diopter is of the order of 20 μm .
4. (Currently Amended) The optical component according to claim 1, further comprising ~~characterized in that it comprises~~ a photodiode incorporating the light-absorbing layer.
5. (Currently Amended) The optical component according to claim 1, wherein ~~characterized in that~~ the waveguide is a diluted waveguide.
6. (Currently Amended) The optical component according to claim 1, wherein ~~characterized in that~~ the waveguide comprises at least:
a first InP layer,
an InGaAsP layer deposited on the first InP layer, and
a second InP layer deposited on the InGaAsP layer.

Please add the following new claims:

7. (New) The optical component according to claim 1, wherein the shape of the input face is formed by an etching process.
8. (New) The optical component according to claim 2, wherein the cylindrical diopter shape of the input face is formed by utilizing a deposition of materials and a photosensitive resist.
9. (New) The optical component according to claim 7, wherein the deposition of materials comprises a layer of silicon nitride.
10. (New) The optical component according to claim 7, wherein the deposition of materials comprises a layer of silicon dioxide.
11. (New) A monolithic optical component comprising:
a photodiode; and
a waveguide coupled evanescently to the photodiode via a light-absorbing layer, the waveguide having one end coupled with an input face that is configured to receive an input wave, wherein the input face is convex.
12. (New) The optical component according to claim 11, wherein the shape of the input face is formed by an etching process.
13. (New) The optical component according to claim 11, wherein the input face has the shape of a cylindrical diopter.
14. (New) The optical component according to claim 11, wherein the cylindrical diopter shape of the input face is formed by utilizing a deposition of materials and a photosensitive resist.

15. (New) The optical component according to claim 11, wherein the waveguide is a diluted waveguide.
16. (New) A monolithic optical component comprising:
a photodiode; and
a waveguide coupled to the photodiode via a light-absorbing layer, the waveguide having one end coupled with an input face that is configured to receive an input wave, wherein the input face is formed by utilizing a deposition of materials and a photosensitive resist such that the input face has a shape of a cylindrical diopter.
17. (New) The optical component according to claim 16, wherein the waveguide comprises an InP layer and an InGaAsP layer.
18. (New) The optical component according to claim 17, wherein the InGaAsP layer has a thickness of 0.16 μm .
19. (New) The optical component according to claim 16, wherein the cylindrical diopter is a convex convergent cylindrical diopter.
20. (New) The optical component according to claim 16, wherein the waveguide is a diluted waveguide.